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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,987	01/30/2004	YU-HSIANG LIN	11108-US-PA	1986

31561 7590 12/11/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

BODDIE, WILLIAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,987

Applicant(s)

LIN ET AL.

Examiner

William L. Boddie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: paragraph 28, line 5, reads: "dependent oftemp the number." Appropriate correction is required.

Claim Objections

2. Claim 5 is objected to because of the following informalities: claim 5 states, "the light-on signal is a functionally dependent of a number of the pixels." This is incorrect grammatically. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al. (US 2003/0016189).

With respect to claim 1, Abe discloses, a driving method of improving a brightness uniformity (paras. 232-233) of a plurality of pixels on an Organic Light-Emitting Diode (OLED)/Polymer Light-Emitting Diode (PLED) display (para. 159), comprising the steps of:

loading (DataLoad in fig. 63) a plurality of driving data (SRGB in fig. 63) representing a brightness of each of the pixels on the OLED/PLED display (para. 831);

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and adjusting (note the insertion of time in the emission period of fig. 15c) a light-on interval (period 1 + period 2 in fig. 15) of each of the pixels on the OLED/PLED display according to the driving data (paras. 351-355; to summarize, Abe clearly adjusts the light-on interval, or emission period, based on an analyzation of the driving data).

With respect to claim 2, Abe discloses, the driving method as recited in claim 1 (see above), wherein the driving data is loaded based on a loading signal (DataLoad in fig. 63; para. 831).

With respect to claim 3, Abe discloses, the driving method as recited in claim 2 (see above), wherein the driving data is loaded at falling edge of the loading signal (clear from fig. 63 that this is the case).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (US 2003/0016189) in view of Akimoto et al (US 6,950,081).

With respect to claim 4, Abe discloses, the driving method as recited in claim 1 (see above).

Abe does not expressly disclose, wherein a light-on signal controls the light-on interval of each of the pixels on the OLED/PLED display.

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Akimoto discloses, wherein a light-on signal (32 in figs. 10-11 for example) controls a light-on interval of each of the pixels (70 in fig. 10) on a OLED/PLED display (col. 1, lines 17-19).

Akimoto and Abe are analogous art because they are both from the same field of endeavor namely, control circuitry and driving methods for organic displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the light-on signal of Akimoto in the organic display taught by Abe.

The motivation for doing so would have been to lessen the afterimage effect (Akimoto; col. 3, lines 1-7).

Therefore it would have been obvious to combine Akimoto with Abe for the benefit of lessening the effects of afterimages on the display to obtain the invention as specified in claim 4.

With respect to claim 5, Abe and Akimoto disclose, the driving method as recited in claim 4 (see above).

Akimoto further discloses, wherein a pulse width of the light-on signal is variable to control the visual display intensity of the images (col. 12, lines 33-44).

Abe further discloses, wherein a pulse width of the light-on interval (period 1+period 2 in fig. 15) is functionally dependent of a number of the pixels on the OLED/PLED display that are to be turned on by the driving data (fig. 15; paras. 351-355 for example).

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wlb
11/30/06

AMR A. AWAD
SUPERVISORY PATENT EXAMINER

